

ABSTRACT OF THE DISCLOSURE

A method and apparatus for forming elongated composite structural members with a desired cross-sectional geometry as taken transverse to the length of the member. The apparatus may include a base with a substantially elongated mandrel mounted thereon. One or more rollers configured to at least partially complementarily engage the mandrel are configured to roll over and press a plurality of plies of composite material onto the mandrel. The rollers may be configured to form intermediate structures which partially conform to the geometry of the mandrel prior to forming the final structure, which substantially completely conforms to the geometry of the mandrel. The rollers serve to both form and debulk the structure. The present invention enables the formation of elongated structural members from resin-impregnated materials while maintaining the materials in a substantially uncured state. The formed members may then be cocured with a skin or other composite structure.

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